

1 **WHAT IS CLAIMED IS:**

2 1. A moving-loop advertisement device comprising:

3 a cover;

4 a rod assembly composed of at least two rollers arranged in parallel,

5 wherein one of the two rollers acts as a driving roller and mounted in said cover,

6 and the other roller acts as a driven roller;

7 a driving device for driving said driving roller to rotate;

8 a display screen surrounding the at least two rollers, wherein

9 advertisement sections are provided on the rolling screen and plural labels are

10 formed along one edge of the display screen;

11 a position sensor mounted in said cover and emitting signals to detect

12 whether any label passes through the position sensor;

13 wherein when any label passes through the position sensor, said driving

14 device is paused to stop the rotation of the display screen thus to demonstrate one

15 complete advertisement section.

16 2. The moving-loop advertisement device as claimed in claim 1, wherein

17 said position sensor is an optical sensor.

18 3. The moving-loop advertisement device as claimed in claim 2, wherein

19 the advertisement device further has a tension adjustment device provided on the

20 rod assembly to apply outward tension forces with opposite directions on the

21 rolling screen, wherein when the display screen is rolling, the applied opposite

22 tension forces maintain a surface of the display screen smooth.

23 4. The moving-loop advertisement device as claimed in claim 3, wherein

24 said tension adjustment device is a coil formed by two segments both twisted

1 around one of the at least two rollers, where the two segments have opposite
2 twisting directions.

3 5. The moving-loop advertisement device as claimed in claim 4, where
4 two distal ends of the coil respectively abut against two enlarged ends of the one
5 of the at least two rollers.

6 6. The moving-loop advertisement device as claimed in claim 3, wherein
7 said tension adjustment device is helical ribs integrally raised from and wound
8 around one of the at least two rollers, where the helical ribs are divided into two
9 groups with opposite winding directions on the one of the at least two rollers.

10 7. The moving-loop advertisement device as claimed in claim 5, wherein
11 the at least two rollers are formed by a driven roller and a driving roller to which
12 the driving device connects, and the coil is twisted around the driven roller.

13 8. The moving-loop advertisement device as claimed in claim 7, wherein
14 the at least two rollers are formed by a driven roller and a driving roller to which
15 the driving device connects, and the coil is twisted around the driven roller, the
16 tension adjustment device further has:

17 helical ribs integrally raised from and wound around the driving roller,
18 where the helical ribs are divided to two groups with opposite winding
19 directions.

20 9. The moving-loop advertisement device as claimed in claim 4, wherein
21 the at least two rollers are extendable in length.

22 10. The moving-loop advertisement device as claimed in claim 5,
23 wherein the at least two rollers are extendable in length.

24 11. The moving-loop advertisement device as claimed in claim 3, said at

1 least two rollers being a driving roller and a driven roller, wherein
2 the driving roller is composed of a hollow central tube with two
3 openings through which a first rod and a second rod respectively insert into the
4 central tube; and

5 the driven roller is composed of a hollow central tube with two openings
6 through which a first rod and a second rod respectively insert into the central
7 tube;

8 said tension adjustment device comprises a first coil, a second coil and a
9 third coil which are respectively twisted around the central tube, the first rod and
10 the second rod of the driven roller, where the first coil is formed by two
11 connected segments with opposite twisting directions around the central tube.

12 12. The moving-loop advertisement device as claimed in claim 11, said
13 tension adjustment device further comprises:

14 helical ribs integrally raised from and wound around the center tube of
15 the driving roller, where the helical ribs are divided to two groups with opposite
16 winding directions; and

17 a fourth coil and a fifth coil, which are respectively wound around the
18 first rod and the second rod of the driving roller.

19 13. The moving-loop advertisement device as claimed in claim 7,
20 wherein the driving device is a motor.

21 14. The moving-loop advertisement device as claimed in claim 8,
22 wherein the driving device is a motor.

23 15. The moving-loop advertisement device as claimed in claim 11,
24 wherein the driving device is a motor.

- 1 16. The moving-loop advertisement device as claimed in claim 12,
- 2 wherein the driving device is a motor.